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Safe Sex Versus Safe Love? Relationship Context and Condom Use Among Male Adolescents in the Favelas of Recife, Brazil

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This study examined the influence of the relationship context where adolescent sexual activity takes place on contraceptive decisions. The data were collected in a specially designed survey carried out in May 2000 on 1,438 adolescent males aged 13–19 residing in *favelas* (urban slum areas) of Recife, Brazil. A logistic regression analysis of condom use at last sexual intercourse and a multinomial logit analysis of contraceptive method choice were performed for 678 sexually active adolescents. Educational attainment, degree of knowledge of HIV transmission and prevention, and condom use at first sexual intercourse were found to be significantly associated with current condom use. Regarding the relationship context, the analysis revealed that adolescent males in steady relationships were less likely to use condoms, less likely to regard themselves at risk of HIV infection, and more concerned about pregnancy prevention than adolescents in casual relationships. Differentials in condom use by type of relationship, however, did not result from a higher rejection of contraception by steady partners but from their higher likelihood to rely on other contraceptive methods. Results suggest that prevention campaigns need to take into account the intimate context where adolescents assess potential health risks, and to address the divergent symbolic meanings condoms may have in different types of relationships. If an increase of condom use among stable sexual partners is pursued, public health campaigns might need to romanticize condom use as a sign of love and trust and place more emphasis on the benefits of dual protection.

KEY WORDS: adolescents; sexual behavior; HIV prevention; condom use; Brazil.

INTRODUCTION

Adolescent sexual and reproductive health has become a major focus of research as well as a key target in policy formulation and implementation. On the political and institutional front, the Cairo Program of Action (United Nations, 1995) contributed to raise awareness within the international community of the vulnerabilities, health risks, and special needs of adolescents, and urged increased efforts to assure their safe passage to adulthood. The realization that more than half of current HIV infections occur before age 25 (UNAIDS, 2002) has also contributed to make adolescents an essential focus in HIV-prevention efforts.

Adolescents are immersed in the process of developing their own identity and establishing interpersonal bonds beyond the family, including romantic and sexual relationships. This period of emotional and sexual maturation encompasses continuous experimentation and learning, as well as exposure to potential reproductive health risks, such as unintended pregnancies, STIs, and HIV infection (AGI, 1998). Among the youngest, these risks are often exacerbated by inadequate information, social prejudices that hamper a suitable sexual education, rigid and stereotypical gender roles, fear of stigmatization, and restricted access to reproductive health services

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(Aggleton, Parker, & Maluka, 2003; Kiragu, 2001). The focus of HIV-prevention efforts on adolescents is not only justified by their increased exposure to potential health risks but also because they are more amenable to behavioral change than adults; establishing safe sexual habits from the start is easier than changing risky behaviors already entrenched (Schutt-Aine & Maddaleno, 2003). Furthermore, behavioral patterns established during this critical life stage have major repercussions throughout adulthood (Burt, 1998).

According to the last 2000 census, adolescents aged 10–19 comprise more than one-fifth of Brazil's population. Early sexual initiation and an upward trend in adolescent childbearing are some of the documented trends for this segment of the population (Gupta, 2000; Gupta & Leite, 1999). Brazil also accounts for more than half of AIDS cases reported in the Latin American region (PAHO, 2002). Although the national incidence rate of AIDS has recently stabilized (Ministério da Saúde, 2002; UNAIDS/WHO, 2002) and there has been a substantial reduction of AIDS-related mortality due to universal access to retroviral therapy since 1996 (Marins et al., 2003), HIV incidence rates among youth continue to rise. During the past decade, both governmental and nongovernmental organizations have implemented numerous campaigns and youth-oriented programs, with a special emphasis on condom promotion and distribution. Public health efforts have been relatively successful and there has been a remarkable change in awareness and attitudes among adolescents. However, further efforts are still needed to translate HIV awareness, which is now practically universal, into behavioral change (Beria, 1998; Ford, Vieira, & Villela, 2003; Paicheler, 1999).

Several behavioral change theories, such as the Health Belief Model, social learning theory, the Theory of Reasoned Action, and the Theory of Planned Behavior have been commonly used to frame HIV-prevention research and to guide programs targeted at young people (DiClemente, 1994; UNAIDS, 1999). These theoretical frameworks emphasize the importance of helping adolescents to acquire accurate information and skills related to HIV prevention. It has been generally assumed that if adolescents could only develop appropriate knowledge and skills, they would be able to change their behavior in order to enhance their sexual health. However, these approaches usually fail to take into account sociocultural factors, as well as community, family, and partner influences on adolescents' attitudes, "choices" and behaviors (Gage, 1998). There is also a growing recognition that adolescent sexual decision-making and behavior take place in a context that is socially and emotionally more complex than other health-related behaviors.

More recently developed approaches, such as the "interactional framework" (Van Campenhoudt, Cohen, Guizzardi, & Hausser, 1997), introduce an emphasis on the interaction between sexual partners and the context of their relationship. From this perspective, the characteristics and dynamics of the relationship between partners play a key role in risk perception and risk management (Bastard, Cardia-Vonèche, Peto, & van Campenhoudt, 1997). Some dimensions of a relationship that are relevant to HIV prevention include gender norms and power inequality (Blanc, 2001), partners' heterogamy (Ford, Sohn, & Lepkowski, 2001), interpersonal communication (Stone & Ingham, 2002), and degree of emotional involvement (Lear, 1995). The role of emotion, trust, and commitment in structuring sexual interaction and affecting HIV-related risks has been often overlooked, but the fact that the same individual behaves differently in a casual and a steady romantic relationship suggests that relationship-specific norms, values, and expectations condition sexual and contraceptive decision-making (Aggleton, Ball, & Mane, 2000).

Relatively few studies have taken into account the relationship context of contraceptive decision-making and the evidence is mixed. Some studies have found that steady couples are more likely to use contraception than casual partners (Manning, Longmore, & Giordano, 2000), partly because it is easier for them to anticipate a sexual encounter and hence plan ahead. The level of communication is also higher and discussions over contraception more frequent among steady partners than casual sexual partners (Landry & Camelo, 1994). Yet, when focusing on condom use, several studies have found a negative association between the degree of commitment to the relationship or its duration and condom use (Adetunji, 2000; Civic, 1999; Macaluso, Demand, Artz, & Hook, 2000; Meekers & Klein, 2002). The main underlying explanation is that emotional involvement leads to underestimation of personal risk, hence affecting the perceived need to use condoms (Reisen & Poppen, 1999).

Although adolescents usually recognize that HIV poses a threat for young people in their communities, many find it difficult to perceive themselves at risk. Difficulties to personalize risk might be even greater when involved in a steady relationship, because of the conflicting narratives of safe sex and romantic love (Kirkman, Rosenthal, & Smith, 1998; Rosenthal, Gifford, & Moore, 1998). The symbolic meaning of condoms often varies in the context of each particular relationship. Condom use may mean mistrust or infidelity to some and care and love to others; unprotected sex may mean irresponsibility within one relationship and commitment

in another (Van Campenhoudt et al., 1997). There is some indication that strong emotional ties and trust in one's partner can act as an important barrier to condom use (Afifi, 1999; Longfield, Klein, & Berman, 2002). This is partly because condoms are often associated with casual sex, promiscuity, infidelity, and disease and AIDS-prevention campaigns may have unintentionally reinforced this association. Thus, in the context of a romantic relationship, proposing condom use may be interpreted as an admission or accusation of sexual infidelity, undermine trust, and jeopardize the relationship if presented as disease prevention (Gavin, 2000), although it may be welcome as a sign of concern if presented as pregnancy prevention.

This study examined adolescent patterns of condom use, focusing on the relationship context in which sexual activity takes place. After presenting a descriptive profile of the context of adolescents' last sexual relationship, two research questions were addressed in a multivariate framework: (1) to what extent condom use patterns differ by type of partnership and (2) whether there is a trade-off between condoms and other contraceptive methods by type of partnership.

METHOD

Procedure and Materials

This study is part of an experimental project aimed at promoting condom use among low-income adolescent males in Recife (the second largest city in Brazil's Northeast) and assessing the impact of a specially designed intervention.[4] The focus on adolescent men was decided on the basis of earlier studies that showed that in low-income areas of Brazil men tend to take the lead in initiating sex and deciding whether to use protection (Barker & Loewenstein, 1997; Goldstein, 2003), and because men's responsibilities and needs for sexual and reproductive health care services have long received less attention than women's (AGI, 2003).

The data presented here were collected in a baseline survey carried out in May 2000 on 1,438 unmarried adolescent males aged 13–19 living in *favelas* (urban slum areas) of Recife. The survey questionnaire included questions on sociodemographic background, knowledge about sexual matters, HIV risk awareness and beliefs, and attitudes relevant to condom use. The survey also obtained partnership, sexual, and contraceptive histories for participants' last four partners, including the classification of each relationship as casual or steady.

In designing the survey, a considerable effort was made to ensure that questions were culturally sensitive. Survey tools were pretested several times to obtain the best possible data quality. Qualitative data (focus groups and in-depth interviews) were also collected and used in the design and refinement of the survey instrument, and special attention was made to employ adolescents' own terminology when inquiring about partnership and sexual issues. Interviewers were young men in their 20s with at least 2 years of university studies in psychology or sociology, who were experienced in fieldwork. These men were carefully trained and were also involved in the qualitative fieldwork for the project. For the survey, they were instructed to spend time building rapport with participants before conducting interviews.

The survey questionnaire was addressed to all unmarried adolescent boys aged 13–19 living in four low-income areas: the *bairros* (neighborhoods) of Campina do Barreto, Cajueiro, Arruda, and Bultrins. These areas were selected on the basis of their socioeconomic conditions. The *Instituto Brasileiro de Geografia e Estatística* (the Brazilian equivalent of the Census Bureau) produces city maps showing the socioeconomic levels of census tracts. Using this information, four areas were identified that were wholly composed of census tracts classified in the lowest socioeconomic strata. The refusal rate was approximately 20%.

Participants

The sociodemographic and educative background of all sexually experienced adolescent males interviewed are summarized in Table I. Although the overall sample was evenly distributed among ages 13–19, the age composition of the working sample was relatively older (with a mean age of 16.9 years), because it was restricted to surveyed adolescents who were sexually active in the last 2 years prior to the survey. Still, one-fifth of sexually experienced adolescent boys were below age 16.

Recife is characterized by a strong ethnic mixture. Accordingly, more than half of adolescent boys (55%) reported themselves of "mixed race." Catholicism was the predominant religion, although nearly one-third of participants reported no religion. A relative wealth index

[4]The intervention, named *Proteger*, was a peer-led outreach program designed to encourage adolescent males to adopt and maintain safe sexual behavior and lasted 15 months. Under a youth-to-youth scheme, adolescent educators were recruited from the community and trained to convey information on sexual and reproductive health issues and to promote and distribute condoms among their peers.

Table I. Percentage Distribution of Sexually Experienced Adolescent Males Interviewed ($N = 678$)

Sociodemographic background	%	Education and knowledge	%	Previous sexual history	%
Current age		Years of schooling		Age at first sex	
13–15	19.9	0–4	22.3	<13	16.7
16–17	37.2	5–6	30.1	13–14	43.5
18–19	42.9	≥7	47.6	≥15	39.8
Race/ethnicity					
White	24.8	Currently enrolled in school	82.3	Used condom at first sex	32.3
Black	17.8				
Mixed	54.9	Had sexual education at school	63.9	Partners in past 2 years	
Religion				1–2	45.0
Catholic	56.0			3–4	35.8
Evangelist/other	11.7	Knowledge of HIV		≥5	19.2
None	32.3	0–4 correct	15.0		
Relative wealth index		5–7 correct	77.9	Ever had multiple partners	36.4
Low	25.7	8 correct	7.1		
Medium	54.9				
High	19.5				
Two-parent family	48.1				

was computed on the basis of participant's household assets and amenities (e.g., a radio or a refrigerator), and classified into low (less than 9 household goods), medium (9–11), and high (12+). Although all the boys came from impoverished neighborhoods, this cumulative index was aimed to capture relative socioeconomic differentials. According to this classification, approximately one-fifth of the participants lived in relatively less impoverished households. The prevailing family structure reflected a high prevalence of broken families. More than half of the boys (52%) did not live with their two biological parents at the time of the survey, mainly as a consequence of parental separation.

The large majority of participants (82%) were still attending school. The length of compulsory education in Brazil is 8 years—from age 7 to age 14—and corresponds to the primary school cycle. Given that participants' ages were between 13 and 19, all of them should have attended school at least for 7 years. However, 22% had completed less than 5 years, and 30% between 5 and 6 years. Enrollment discontinuation, grade repetition, and dropping-out rates are generally high in Brazil (UNESCO, 2002) and presumably more so in disadvantaged communities. Nearly two-thirds of participants had been exposed to sexual education at school and were reasonably well informed about AIDS. The questionnaire included eight questions related to AIDS transmission and prevention. A score of AIDS knowledge was constructed by adding a point for each correct response. Although only 7% of participants gave a correct answer to all the eight items, a large proportion (78%) answered correctly between five and seven items.

Statistical Methods

Logistic regression analysis was used to examine the probability of condom use at last sexual intercourse, with a special focus on the impact of relationship-specific characteristics. We first estimated bivariate models that included only a single explanatory variable, and then a model that incorporated all variables, which were classified into several blocks (relationship context, sociodemographic background, educational and cognitive factors, and prior sexual history), but entered simultaneously. All the variables included have been documented in the literature to influence contraceptive decision-making and behavior (Castro Martín & Njogu, 1994; Juarez, Castro Martín, & Gayet, 2004; Kirby & DiClemente, 1994;). To ease interpretation, the results were expressed in terms of odds ratios, calculated by exponentiating each logit coefficient. Odds ratios larger than one indicated greater likelihood of condom use than the reference category and, conversely, odds ratios smaller than one indicated lower likelihood of condom use. The analysis was restricted to 678 adolescent participants who were sexually active in the 2 years prior to the survey, which represent 47% of the sample.

A multinomial logistic regression model was also used to examine contraceptive method choice by type of partnership. In this model, the dependent variable was classified into three categories: no contraception, condom, and other contraceptive method, and condom use was selected as the reference category. We present results for two contrasts: the odds of not using contraception versus

using condoms and the odds of using another method rather than condoms.

RESULTS

Adolescents' Sexual Biography

Nearly two-thirds of participants reported having first engaged in sexual intercourse before age 15, and 17% before age 13 (Table I). Because the analytical sample was restricted to those sexually experienced, the mean age at first intercourse is likely to be biased downwards. For this reason, we calculated the median age at first sexual intercourse for the whole sample, using life table techniques designed to handle censored data and the result was 15.6 years.[5] Only one-third of participants reported having used condoms as protection in their first sexual encounter.

As corresponds to a period of sexual learning and experimentation, short-term relationships and relatively frequent partner change prevailed during adolescence: one-third of sexually experienced participants reported three to four partners in the past 2 years, and nearly one-fifth reported five or more partners. Although the dominant pattern is one of serial monogamy, simultaneous relationships were not rare: 36% of adolescent boys reported having ever had multiple partners at the same time.

The Context of Last Sexual Relationship

Prior in-depth interviews revealed that adolescents often defined their relationships differently according to the degree of courting, commitment, and emotional involvement with the partner (*parceira*), distinguishing between casual (*ocasional*) and steady (*firme*) partnerships. Focus-group discussions also revealed that different types of relationships were associated with different social expectations and normative values. Table II contrasts the profile of casual and steady relationships involving sexual intercourse, and explores to what extent contraceptive behavior differs between them.

Approximately 48% of participants referred to their last sexual relationship as steady and 52% as casual, suggesting that both types of relationships are prevalent during adolescence. A large majority of adolescents in steady relationships labeled their partner as girlfriend (*namorada*) whereas most adolescents in casual relationships labeled their partner as friend (*amiga*), although there was not full correspondence between level of commitment and symbolic representation of the partner: 18% of adolescents in casual relationships referred to their partner as girlfriend.

Most adolescents had known their partner for some time before initiating the relationship, but 18% of casual partners and 12% of steady partners started dating the same day they met. The interval between the onset of the relationship and the beginning of sexual intimacy differed by type of partnership. One out of four adolescent boys in a casual partnership had sexual intercourse the same day the relationship started compared to 6% of adolescents in a steady relationship. Conversely, only 10% of adolescents in casual partnerships initiated sexual intimacy at least 1 month after the onset of the relationship, compared to 35% of their counterparts in steady partnerships. In both casual and steady relationships, partners were commonly introduced by friends or, less frequently, by a family member (in about 12% of the cases). Involvement with a woman 3 or more years older was more frequent in the context of a casual partnership than in a steady one and coital frequency was higher among steady partners than casual partners.

Table II also presents several indicators of contraceptive behavior patterns for the two types of relationships. The proportion of adolescents who had ever used condoms was virtually the same in both casual and steady partnerships, and there were no significant differences in condom use at last sexual intercourse by type of partnership. Differentials were, however, significant when consistency of condom use was examined: 41% of adolescents in a steady relationship reported having used condoms always with that partner compared to 48% of adolescents in a casual relationship.

The data also showed significant differences regarding the motivation of condom use by type of relationship. Although dual protection from STIs/HIV and unintended pregnancy was mentioned by a large proportion of adolescents in both casual and steady relationships, concern with pregnancy prevention as the main reason for condom use was reported much more frequently among adolescents in steady relationships (41%) than among their counterparts in casual relationships (19%). Condoms were the preferred method of contraception for the vast majority of sexually active adolescents (95%); however, congruent with their greater concern with pregnancy prevention, adolescents in steady partnerships were more likely to rely on other contraceptive methods (8%) than those in casual relationships (2%). Among those adolescents who used a contraceptive method different than the condom, a large majority relied on the pill (85%).

[5]This estimate was very close to the national estimate for 1996, based on data from the *Pesquisa Nacional sobre Demografia e Saúde*, which was 15.3 years (BEMFAM/Macro International, 1997).

Table II. Relationship Context and Contraceptive Patterns by Type of Relationship (in %)

	All relationships ($N = 678$)	Casual relationships ($N = 356$)	Steady relationships ($N = 322$)	p value (χ^2)
Relationship context				
Type of relationship				
Casual	52.5			
Steady	47.5			
Type of partner				<.001
Girlfriend	50.6	18.0	86.6	
Friend	38.5	68.0	5.9	
Other	10.9	14.0	7.5	
Knew partner prior to relationship				*ns*
Same day	14.9	17.7	11.8	
<6 months	49.9	48.3	51.6	
>6 months	35.3	34.0	36.6	
Time from relationship onset to sexual intercourse				<.001
Same day	16.1	25.0	6.2	
1 week	22.1	28.4	15.2	
2–4 weeks	40.0	37.1	43.2	
≥5 weeks	21.8	9.6	35.4	
Partner introduced by				*ns*
Family/neighbor	12.5	12.6	12.4	
Friends	51.8	49.4	54.3	
No one	35.7	37.9	33.2	
Difference in partner's age				< .001
≥3 years	11.2	15.7	6.2	
Frequency of sex				<.001
1–4 per month	64.0	73.3	53.7	
5–8 per month	20.8	18.3	23.6	
≥9 per month	15.2	8.4	22.7	
Contraceptive patterns				
Ever used a condom	86.3	86.2	86.3	*ns*
Used condom at last intercourse	59.7	61.0	58.4	*ns*
Used other contraceptive method	4.7	1.7	8.1	<.001
Consistency of condom use with last partner				<.05
Never	37.5	37.9	37.0	
Sometimes	17.7	14.0	21.7	
Always	44.8	48.0	41.3	
Reason to have used a condom				<.001
To avoid pregnancy	29.4	19.4	41.0	
To avoid STIs/HIV	14.8	16.6	12.8	
To avoid both	55.8	64.1	46.3	
Perceived personal risk great/moderate	30.7	34.0	27.0	<.05

One of the underlying reasons for divergent contraceptive patterns by type of relationship might be different degrees of perceived risk. Survey respondents were asked to rate their personal risk perception on a 4-point scale from no risk to great risk and the proportion of adolescents who assessed their risk as "great" or "moderate" was higher among those in casual partnerships (34%) than in steady partnerships (27%).

Correlates of Condom Use

The comparison of the bivariate and the multivariate odds ratios in Table III showed that differentials in condom use between casual and steady relationships became larger and statistically significant when the rest of the variables were taken into account. Adolescent boys in a steady relationship had a 39% lower likelihood of using a condom than their counterparts in a casual relationship, once other characteristics were controlled for. However, whether adolescents identified their partner as "girlfriend" or "friend" did not have a significant effect on condom use. Only the residual category (other), which probably encompasses a heterogeneous mix of partners, showed significant lower odds of condom use.

Familiarity with the partner before the onset of the relationship did not exert a strong influence on the level of condom use. Compared to adolescents that initiated their relationship the same day they met their partner, adolescents who knew their partner beforehand were less likely to use a condom, but the association was not statistically significant. However, adolescents whose partner was introduced by a family member had 51% lower odds of condom use than the rest. Other characteristics of the relationship, such as age heterogamy between partners and frequency of intercourse, did not have a significant effect on condom use patterns.

With regard to adolescents' sociodemographic background, the odds of condom use were higher among Catholics—despite the official church opposition to modern contraception—and among those who live in households relatively better-off. However, the effects of adolescent's age, ethnicity, and family structure on condom use were not statistically significant.

Consistent with prior research findings, educational and cognitive factors were found to play an important role in risk-taking and preventive behavior. Although current school enrolment had no significant effect on condom use, higher educational attainment significantly increased the odds of condom use. Specifically, those adolescents with 7 or more years of schooling had 89% higher odds of using a condom than those with less than 5 years of schooling. Having been exposed to sexual education at

Table III. Odds Ratios from Logistic Regression Analysis of Condom Use at Last Sexual Intercourse

	Bivariate models	Multivariate model
Relationship context		
Type of relationship		
(Casual)	1.00	1.00
Steady	0.90	0.61*
Type of partner		
(Girlfriend)	1.00	1.00
Friend	0.92	0.71
Other	0.48**	0.34*
Knew partner prior to relationship		
(Same day)	1.00	1.00
<6 months	0.66	0.60
>6 months	0.62	0.63
Partner introduced by family		
(No)	1.00	1.00
Yes	0.58*	0.49*
Partner older by ≥3 years		
(No)	1.00	1.00
Yes	0.81	0.82
Frequency of sex		
(<5 per month)	1.00	1.00
≥5 per month	0.77	0.95
Sociodemographic background		
Age		
(13–15)	1.00	1.00
16–17	1.06	1.21
18–19	1.15	1.27
Race/ethnicity		
(White)	1.00	1.00
Black	1.39	1.69
Mixed/other	0.88	1.10
Catholic		
(No)	1.00	1.00
Yes	1.38*	1.48*
Relative wealth index high		
(Low/medium)	1.00	1.00
High	2.05**	1.99**
Two-parent family		
(Yes)	1.00	1.00
No	0.95	1.12
Education and knowledge		
Years of schooling		
(0–4)	1.00	1.00
5–6	1.55*	1.46
≥7	2.27**	1.89*
Currently enrolled in school		
(No)	1.00	1.00
Yes	1.49	0.75
Had sexual education at school		
(No)	1.00	1.00
Yes	1.71**	1.40
Knowledge of HIV		
(Any answer incorrect)	1.00	1.00
All answers correct	3.13**	2.61*

Table III. Continued

	Bivariate models	Multivariate model
Previous sexual history		
Age at first sex		
<13	0.61*	0.76
(≥13)	1.00	1.00
Condom use at first sex		
(No)	1.00	1.00
Yes	8.21**	8.40**
Number of partners in past 2 years		
(<5)	1.00	1.00
≥5	0.74	0.55*
Ever had multiple partners		
(No)	1.00	1.00
Yes	0.86	1.00
−2 log likelihood		730.10
df		25

Note. Reference categories are in parentheses.
*$p < .05$.**$p < .01$.

school was associated with higher likelihood of condom use in the bivariate model, but this association was not statistically significant once the rest of the variables were controlled for. As expected, adequate knowledge of HIV prevention and transmission had a considerable impact on condom use patterns. Those adolescents who gave a correct answer to all the eight questions posed on HIV were 2.6 times more likely to use a condom.

Prior sexual history also left an imprint on current contraceptive behavior. According to the bivariate model, early sexual debut was associated with lower odds of current condom use, but the association was nonsignificant once condom use at first sexual intercourse was introduced in the model. Protection at first sexual experience showed the strongest effect among all the variables: the likelihood of current condom use was 8.4 times higher among those who used a condom in their first sexual experience than among nonusers, confirming that early contraceptive patterns have important repercussions on later behaviors. Having experienced risky sexual behaviors in the past, however, did not increase the likelihood of current condom use. Frequent partner change—defined as having had five or more partners in the last 2 years—was negatively related to current condom use, and having ever experienced multiple partnerships did not have a significant influence on current condom use patterns.

Competing Contraceptive Choices

One potential reason why adolescent boys in steady partnerships are less likely to use condoms than their counterparts in casual partnerships is that they rely more often on alternative contraceptive methods. Contraceptive method choice is largely influenced by whether the primary concern is disease prevention or pregnancy prevention: in the first case, the condom is the clear choice; in the second case, other contraceptive methods compete with the condom (Ott, Adler, Millstein, Tschann, & Ellen, 2002). We have documented in preceding sections that concern with unintended pregnancy was reported much more frequently among adolescents in steady partnerships than those in casual partnerships, and that adolescents in steady partnerships were more likely to rely on contraceptive methods other than the condom—mainly the pill—than those in casual partnerships. Although the small number of users of other contraceptive methods advises caution when interpreting the results, we proceeded to test whether type of partnership influences contraceptive method choice once the rest of the variables were controlled in a multivariate framework.

We estimated a multinomial logistic regression model of the type of contraceptive method used at last sexual relationship. The dependent variable was classified into three categories: none, condom, and other contraceptive method, selecting condom use as the reference category. The first column in Table IV displays the odds ratios of using no contraception versus using condoms, and the second column displays the odds ratios of relying on another contraceptive method rather than the condom. Only estimates for the variables related to the relationship context are presented, but all variables included in Table III (sociodemographic background, education and knowledge, and previous sexual history) were controlled for.

The estimates in Table IV suggest that previously documented differentials in the prevalence of condom use by type of partnership were not due to lower use of contraception among steady partners but to the fact that steady partners were more likely to opt for methods of protection other than the condom. There were no statistically significant differences in nonuse of contraception between adolescents in steady and casual relationships, but adolescents in a steady partnership were 8.8 times more likely to have used a contraceptive method other than the condom in their last sexual encounter than their counterparts in a casual partnership. Partners' age heterogamy also increased significantly the odds of using a contraceptive method other than the condom: adolescent boys with partners 3 or more years older than themselves were four times more likely to rely on other contraceptive methods than those with partners of similar or younger age. The frequency of sex also influenced contraceptive method choice: boys who reported five or more sexual encounters a month were 3.5 times more likely to opt for a

Table IV. Odds Ratios from Multinomial Logit Model of Contraceptive Method Choice

	No contraception vs. condom	Other contraceptives vs. condom
Relationship context		
Type of relationship		
(Casual)	1.00	1.00
Steady	1.30	8.82**
Type of partner		
(Girlfriend)	1.00	1.00
Friend	1.29	1.77
Other	2.46*	5.33**
Knew partner prior to relationship		
(Same day)	1.00	1.00
<6 months	1.63	1.30
>6 months	1.58	0.92
Partner introduced by family		
(No)	1.00	1.00
Yes	2.15*	1.54
Partner older by ≥3 years		
(No)	1.00	1.00
Yes	1.07	3.96*
Frequency of sex		
(<5 per month)	1.00	1.00
≥5 per month	0.86	3.50**

Note. The multinomial logit model also controls for all variables included in Table III. Reference categories are in parentheses.
*$p < .05$. **$p < .01$.

contraceptive method different than the condom compared to those with lower sexual frequency.

DISCUSSION

Promotion of condom use as an habitual component of adolescent sexual activity has been partially successful in Brazil. At the national level, data from the 1996 Demographic and Health Survey indicated that condom prevalence rates among sexually active adolescent males aged 15–19 were nearly one-half (47.7%), a substantial increase compared to only one decade ago. The survey data we collected in Recife suggest a continuation of this upward trend in condom use: 59.7% of all sexually active participants reported having used a condom in their last sexual encounter. Nevertheless, unprotected sexual behavior was still common among adolescents, implying that current approaches to condom promotion and distribution may have limitations.

The Brazilian government distributes condoms for free as part of its program to combat HIV/AIDS, but only at health clinics for people who have registered and had a medical examination. Most family planning services in Brazil are provided by NGOs that also distribute condoms, again entailing client registration. In Recife, clinics have week-day working hours and are closed at night and on weekends. Considering that many adolescents do not plan ahead, condoms are often unavailable when needed. Condoms can be purchased at pharmacies, but these are also typically closed at night, are usually not located in shantytowns, and the small price of condoms may be prohibitive for many impoverished young teenagers.

An overlooked dimension that can potentially improve our understanding of contraceptive decision-making is the influence of the relationship context. Prevailing theories of risk prevention in sexual activity have often disregarded the intimate context in which sexual activity takes place. However, the significance of the sexual partner and the degree of emotional involvement in the relationship may shape individuals' evaluation of risk and their perceived need of prevention. Furthermore, in the context of a steady partnership, not only perceived risks tend to be low, but feelings of love and trust could act as a barrier to condom use. In this study, we have explored whether commitment into a relationship encourages or discourages safe sexual behavior.

Sexual experimentation, sporadic relationships, and relatively frequent partner change are common features of partnership dynamics during adolescence. Among the participants in the study, about 53% reported that their last sexual encounter took place within the context of a casual relationship and the rest within a steady relationship, suggesting that both types of partnerships are similarly prevalent among adolescents. The analysis showed evidence that the degree of commitment to the relationship affects the rationale and dynamics of contraceptive decision-making. Adolescent boys in steady relationships were found to be less likely to use condoms, less likely to regard themselves at risk of HIV infection, and more concerned about pregnancy prevention than adolescents in casual partnerships. Multivariate results confirmed that the odds of using a condom with a steady partner were significantly lower than with a casual partner, once individual-level characteristics and factors related to the relationship context were taken into account. However, further analysis using a multinomial logit model revealed that differentials in condom use by type of relationship did not result from a higher rejection of contraception among steady partners, but from their higher likelihood to substitute condoms by other contraceptive methods, mainly the pill. This finding is consistent with the descriptive results that showed that whereas disease prevention dominated the rationale of contraceptive use in casual relationships,

pregnancy prevention was also a very important concern in steady relationships.

Most prevention campaigns have directed their condom promotion efforts primarily toward higher risk situations, such as multiple or casual partnerships, placing little emphasis on lower risk situations, such as monogamous stable relationships. Adolescent contraceptive decision-making and behavior largely conforms to this rationale. However, a definition of high or low risk that may be valid for other developmental stages might be less so during adolescence. The dynamics of sexual behavior during adolescence show that relatively frequent partner change in a pattern of rapid serial monogamy is the norm, and that even those relationships labeled as steady are usually temporary and short-lived. Therefore, risk assessment based on current relationship involvement may not be as adequate as in other life course stages.

This study was subject to several limitations. First, because the survey data were collected in low-income slums of one city, results could not be generalized to the overall Brazilian adolescent population. The focus on disadvantaged neighborhoods was, however, justified by the strong link among early sexual initiation, risk of HIV infection, and poverty in Brazil (Bastos & Szwarcwald, 2000; Parker & Camargo, 2000). A second limitation was that partnership, sexual, and contraceptive histories were based on self-report retrospective information and, as all sensitive issues, might be subject to reporting errors. In this regard, it is important to note that interviews were conducted by well-trained young male interviewers who had been involved in the qualitative fieldwork and spent time building rapport with participants before starting interviews. Focusing the analysis on the last sexual relationship was also expected to minimize recall errors.

The results have several implications for sexual and reproductive health programs. First of all, prevention campaigns need to take into account the intimate context and the characteristics of the partnership where sexual activity takes place, addressing the divergent symbolic meanings condoms may have in different types of relationships. Although condom use could be explicitly promoted with all partners, in some cases, it might be convenient to develop intervention programs that are tailored specifically to different types of relationships. For instance, if an increase in condom use among stable sexual partners is pursued, public health campaigns might need to romanticize condom use as a sign of love and trust, to counteract the symbolic association between condoms and promiscuity or infidelity. Second, given that pregnancy prevention appears to be a primary concern in steady partnerships, reproductive health programs might need to place more emphasis on the benefits of dual protection.

Youth-oriented sexual and reproductive health programs have largely disregarded the role of love and romance in contraceptive decision-making. In focusing their messages on health goals, namely the prevention of HIV transmission, many campaigns have overlooked that most adolescents frame their sexual lives as a search for love rather than health, and that many have difficulties to identify their loved ones as potential sources of risk. Further efforts are needed to emphasize the responsibility dimension of love and commitment, to adapt safe sex messages to the narrative of love, and to incorporate condom use as a natural component of romantic relationships.

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